Atty Docket No. U.S. Dept. of Commerce

	Sheet 1	of	4
et No.	Serial No.		

Patent and Trademark Office

LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

Examiner

P1096R1	
Applicant	
Raju	
Filing Date	Group
23 Jun 1998	

U.S. PATENT DOCUMENTS

Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date
pas	1	5,047,335	10.09.91	Paulson et al.	-	-	7.
1	2	5,096,816	17.03.92	Maiorella	-		2865 2865
	3	5,116,964	26.05.92	Capon et al.	-		286 186 186 186
[4	5,278,299	11.01.94	Wong et al.	-	-	2.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3
	5	5,510,261	23.04.96	Goochee et al.	-	-	818 09/ 8/32
1 1	6	5,565,335	15.10.96	Capon et al.	<u>-</u>	 - .	
1	7	5,610,297	11.03.97	Powers		_	

FOREIGN PATENT DOCUMENTS

Examir Initials			Document Number	Date		Country	Class	Subclass	Transla Yes	ation No
My?	<u> </u>	8	WO 92/20798	26.11.92	РСТ	wo		_		
•	١	9	WO 94/11026	26.05.94	PCT	~ o	_	_		
	I	10	WO 95/19181	20.07.95	PCT	₩0	_	_		
	1	11	WO 95/23865	08.09.95	PCT	ω_0	-	_		
		12	WO 96/30046	03.10.96	PCT	₩¢	-	-		
,	$\sqrt{}$	13	WO 97/30087	21.08.97	PCT	wu * *				

OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

135	14	Abraham et al., "p55 Tumor Necrosis Factor Receptor Fusion Protein in the Treatment of Patients With Severe Sepsis and Septic Shock" <u>Journal of the American Medical Assn.</u> 277:1531-1538 (1997)
	15	Ashkenazi et al., "Protection Against Endotoxic Shock by a Tumor Necrosis Factor Receptor Immunoadhesin" Proc. Natl. Acad. Sci. 88:10535-10539 (1991)
	16	Beale et al., "Structure and function of the constant regions of immunoglobulins" <u>Ouarterly Reviews of Biophysics</u> 9:135-180 (1976)
	17	Boeggeman et al., "Expression of deletion constructs of bovine β-1,4-galactosyltransferase in Escherichia coli: importance of Cys134 for its activity" <u>Protein Engineering</u> 6:779-785 (1993)
	18	Bolt et al., "The generation of a humanized, non-mitogenic CD3 monoclonal antibody which retains in vitro immunosuppressive properties" <u>European Journal of Immunology</u> 23:403-411 (1993)
	19	Borman, "Carbohydrates' Complexities: Glycobiochemists attain a more detailed understanding of the involvement of carbohydrates in intricate life processes" <u>C&EN</u> 74:36-40 (1996)
	20	Borys et al., "Ammonia Affects the Glycosylation Patterns of Recombinant Mouse Placental Lactogen-I By Chinese Hamster Ovary Cells in a pH-Dependent Manner" <u>Biotechnology and Bioengineering</u> 43:505-514 (1994)
	21	Borys et al., "Culture pH Affects Expression Rates and Glycosylation of Recombinant Mouse Placental Lactogen Proteins by Chinese Hamster Ovary (CHO) Cells" <u>Bio/Technology</u> 11:720-724 (1993)
	22	Boyd et al., "The effect of the removal of sialic acid, galactose and total carbohydrate on the functional activity of campath-1H" Molecular Immunology 32:1311-1318 (1995)
4	23	Cant et al., "Glycosylation and functional activity of anti-D secreted by two human lymphoblastoid cell lines" Cytotechnology 15:223-228 (1994)

Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. Dept. of Con			t. of Commerce	Atty Docket No.	Serial No.	
Patent and Trad			Trademark Office	P1096R1	· · ·	
LIOT	. OF D			Applicant		
FISI	OF DI	SCLOSURES CITED BY APPLICANT		Raju	T =	
(L	Jse sev	veral sheets if necessary)		Filing Date 23 Jun 1998	Group	
		OTHER DISCLOSURES (Including		•	•	
Ms	24	Carter et al., "Humanization of an anti-p185HERZ Sci. 89:4285-4289 (1992)	antibody for h	human cancer therapy" <u>Proc. Natl. Acad.</u>		
	25	Chatterjee et al., "Analysis of the Sequences of Biochem Cell. Biol. 27:329-336 (1995)	Human β-1,4-Ga	lactosyltransferase o	DNA Clones" <u>Int. J.</u>	
\neg	26	Chotigeat et al., "Role of Environmental Conditi Levels of Sialytransferase for hFSH Produced by				
	27	Chuang et al., "Elimination of N-linked glycosylon structure and function" <u>Journal of Immunology</u>			stant region: effects	
	28	Cox et al., "Effect of Media Composition on the in HeLa Cells" In Vitro 19(1):1-6 (1983)	Induction of Ch	norionic Gonadotropin	by Sodium Butyrate	
	29	Donadel et al., "Human polyreactive and monoreaction binding" Glycobiology 4:491-496 (1994)	tive antibodies	s: effect of glycosyla	ation on antigen	
	30	Duncan et al., "The binding site for Clq on IgG"	<u>Nature</u> 332:738	3-740 (1988)		
	31	Fischer et al., "Reduction of Graft Failure by a Nonidentical Bone Marrow Transplantation in Chil Fanconi's Anemia" Blood 77(2):249-256 (January 1	dren with Immur	- ·		
	32	Gazzano-Santoro et al., "A non-radioactive compl monoclonal antibody" <u>Journal of Immunological Me</u>	ement-dependent		or anti-CD20	
	33	Goochee et al., "The Oligosaccharides of Glycopr Structure and Their Effect on Glycoprotein Prope				
	34	Goochee et al., "The Oligosaccharides of Glycopr Influence on Glycoprotein Properties" <u>Frontiers</u> <u>Biochemistry II</u> (Boulder, Colorado, June 17-21 1	in Bioprocessir	ng II: Proceedings of		
	35	Harris et al., "Refined Structure of an Intact I (1997)			ry 36:1581-1597	
	36	Hart, "Glycosylation" <u>Current Opinion in Cell Bi</u>	ology 4:1017-10	023 (1992)		
	37	Hayter et al., "Glucose-Limited Chemostat Cultur Human Interferon-γ" <u>Biotechnology and Bioenginee</u>			ducing Recombinant	
	38	Hearing et al., "Isolation of Chinese Hamster Ov Cell-Surface Expression of Integral Membrane Gly		_		
	39	Herrmann et al., "Large-Scale Production of a So Saccharomyces cerevisiae Expression System" <u>Prot</u>			ase Using a	
	40	Hourmant et al., "Administration of an Anti-CD11a Monoclonal Antibody in Recipients of Kidney Transplantation" Transplantation 58(3):377-380 (August 1994)				
	41	Hsu et al., "A Comparative Study of the Peroxidase-antiperoxidase Method and an Avidin-biotin Complex Method for Studying Polypeptide Hormones with Radioimmunoassay Antibodies" Am. J. Clin. Path. 75(5):734-738 (May 1981)				
T	42	Hsu et al., "Differential N-Glycan Patterns of S ni Cells" <u>The Journal of Biological Chemistry</u> 27			ed in Trichoplusia	
$ \downarrow $	43	Iwase et al., "Estimation of the Number of O-Linked Oligosaccharides per Heavy Chain of Human Serum IgA1 by Matrix-Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry (MALDI-TOFMS) Analysis of the Hinge Glycopeptide" J. Biochemistry 120:393-397 (1996)				
Examine		N Sil	<u> </u>	ate Considered	12000	
		itial if reference considered, whether or not citation is in confortion formance and not considered. Include copy of this form with n			ation	

FORM PTO-1449			U.S. Dept. of Commerce	Atty Docket No.	Serial No.
			Patent and Trademark Office	P1096R1	<u> </u>
LICT	OE DI	SCLOSURES CITED BY APPLICANT		Applicant	
LIST	OF DI	SCLOSURES CITED BY APPLICANT		Raju	
(L	Jse sev	veral sheets if necessary)		Filing Date 23 Jun 1998	Group
			SURES (Including Author, Title, Da	• • •	
1954	44	Jefferis et al., "Glycosylation Engineering 65:111-128 (1997)	of Antibody Molecules: Struct	ural and Functional Si	gnificance" <u>Antibody</u>
	45	Jefferis et al., "Recognition si Immunology Letters 44:111-117 (1	ptors: the role of gly	cosylation"	
	46	Jenkins et al., "Getting the gly Biotechnology 14:975-981 (1996)	cosylation right: Implication	s for the biotechnolog	y industry" <u>Nature</u>
	47	Kaminski et al., "Radioimmunothe England J. of Medicine 329:459-4	- -	[131] Anti-B1 (Anti-CD	20) Antibody" <u>New</u>
	48	Kim et al., "The Vascular Endoth Regions by Neutralizing Monoclon			logically Relevant
	49	Kleene et al., "Expression of So cerevisiae" <u>Biochem. & Biophys.</u>	•		ccharomyces
	50	Kotz et al., "Immunoglobulin G gaffinoblotting in differential d		<u>-</u>	
Kumpel et al., "Galactosylation of Human IgG Monoclonal Anti-D Produced by EBV-transformed 51 B-lymphoblastoid Cell Lines is Dependent on Culture Method and Affects Fc Receptor-mediated Func Activity" Hum. Antibod. Hybridomas 5:143-151 (1994)					mediated Functional
	52	Le Gros et al., "The Effects of 4(3):221-227 (1985)			
	53	Liu et al., "Production of a Mou Biologic Activity" <u>J. Immunol.</u> 1		Antibody to CD20 with	Potent Fc-Dependent
	54	Malhotra et al., "Glycosylation complement via the mannose-binding	= =		can activate
	55	Maloney et al., "Phase I Clinica Monoclonal Antibody (IDEC-C2B8)			
	56	McLaughlin et al., "Preliminary I IDEC-C2B8 in Patients (PTS) with Clin. Oncol. 15:417 (1996)			
	57	Mizutani et al., "High Glucose as in Cultured Human Vascular Endot! 187(2):664-669 (1992)	helial Cells" <u>Biochemical and</u>	Biophysical Research	Communications
	58	Ohlson et al., "Use of monoclona A 758:199-208 (1997)	l antibodies for weak affinit	y chromatography" <u>Jour</u>	nal of Chromatography
	59	Parekh, "Effects of Glycosylation (1991)	n on Protein Function" <u>Curren</u>	t Opinion in Structura	l Biology 1:750-754
	Parekh et al., "Cell-Type-Specific and Site-Specific N-Glycosylation of Type I and Type II Human 160 Plasminogen Activator" <u>Biochemistry</u> 28:7644-7662 (1989)				Type II Human Tissue
	61	Park et al., "Enhanced β-Galactos subtilis with Glucose Concentrat:			
	62	Press et al., "Radiolabeled-antil England J. of Medicine 329:1219-		ma with Autologous Bon	e Marrow Support" <u>New</u>
V	63	Presta et al., "Humanization of a (September 1, 1993)	an Antibody Directed Against	IgE" <u>J. Immunol.</u> 151(5):2623-2632
Examine	er	1		Date Considered	alroo

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

· · ·	•				
U				Sheet 4 of 4	
FORM	PTO-	•	Atty Docket No.	Serial No.	
LIST	OF DI	Patent and Trademark Office SCLOSURES CITED BY APPLICANT	Applicant Raju		
(L	Jse sev	reral sheets if necessary)	Filing Date 23 Jun 1998	Group	
		OTHER DISCLOSURES (Including Author, Title, Date,	Pertinent Pages, etc.)		
pm	64	Provencher et al., "Estimation of Globular Protein Secondary St: Biochemistry 20:33-37 (1981)	ructure from Circu	lar Dichroism"	
1	65	Rademacher et al., "Re: Conservation and evolution of glycosylar domains" <u>Glycobiology</u> 3:418-419 (1993)	tion sites on immu	noglobulin-type	
	66	Schwientek et al., "Efficient intra- and extracellular production in Saccharomyces cerevisiae is mediated by yeast secretion leaders."	•	_	
	67	Sheeley et al., "Characterization of Monoclonal Antibody Glycos and Identification of Terminal α -Linked Galactose" Analytical B			
\top	68	St. John et al., "Immunologic Therapy for ARDS, Septic Shock, at 103:932-943 (1993)	nd Multiple-Organ 1	Failure" <u>Chest</u>	
	Stoppa et al., "Anti-LFA1 Monoclonal Antibody (25.3) for Treatment of Steroid-resistant Grade III-I 69 Acute Graft-versus-host Disease" <u>Transplant International</u> 4:3-7 (1991)				
	70	Tsuchiya et al., "Effects of Galactose Depletion from Oligosaccl of Human IgG" <u>The Journal of Rheumatology</u> 16:285-290 (1989)	naride Chains on In	mmunological Activities	
	71	Weitzhandler et al., "Analysis of Carbohydrates on IgG Preparat: 83:1670-1675 (1994)	ions" <u>Journal of Pl</u>	narmaceutical Sciences	
	72	Werner et al., "Mammalian Cell Cultures, Part I: Characterization ArzneimForsch./Drug Res. 43(10):1134-1139 (1993)	on, morphology and	metabolism"	
	73	Werner et al., "Mammalian Cell Cultures, Part II: Genetic Engine Fermentation and Process Control" <u>ArzneimForsch./Drug Res.</u> 43		•	
	74	Wittwer et al., "Glycosylation at Asn-184 Inhibits the Conversion Tissue-Type Plasminogen Activator by Plasmin" Biochemistry 29:4:		to Two-Chain	
	75	Wormald et al., "Variations in Oligosaccharide-Protein Interact: Site-Specific Glycosylation Profiles and Modulate the Dynamic Mo Biochemistry 36:1370-1380 (1997)	_		
	76	Wright et al., "Effect of glycosylation on antibody function: implications for genetic engineering" Trends in Biotechnology 15:26-32 (1997) Wyss et al., "The structural role of sugars in glycoproteins" Current Opinion in Biotechnology 7:409-			
\exists	77				
X	- 78	Yamada et al., "Structural changes of immunoglobulin G oligosaco Glycoconjugate Journal 14:401-405 (1997)	charides with age	n healthy human serum	
		·			
		·			

Examiner Date Considered *Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



نمی از			de la companya de la	Sheet $\frac{1}{}$ of $\frac{1}{}$
FORM	PTO-	1449 U.S. Dept. of Commerce Patent and Trademark Office	Atty Docket No.	Serial No. 09/102,865
LIST	OF DI	SCLOSURES CITED BY APPLICANT	Applicant Raju	
(L	Jse sev	veral sheets if necessary)	Filing Date 23 Jun 1998	Group 1633 1649
		OTHER DISCLOSURES (Including Author, Title, Date,		
Edelman et al., "The covalent structure of an entire γG USA 63:78-85 (1969)		<u>USA</u> 63:78-85 (1969)		
	2	Klama et al., "The Abnormalities in the Glycosylation of IgG" R		
	3	Morin et al., "cDNA of the immunoglobulin κ chain of an Epstein cell line: Partial sequence determination and bacterial express 82:7025-7029 (Oct 1985)	ion" <u>Proc. Natl. Ac</u>	cad. Sci. USA
	4	Mulkerrin et al., "Antibody-Mediated Cell Killing Depends Upon (Abstract for the Well-Characterized Biologicals meeting in San	Francisco) (Jan 19	998)
$\overline{}$	5	Raju et al., "Glycopinion: biological significance and methods of recombinant glycoproteins" <u>Biotechnology & Applied Biochemis</u>		
-				
		(IPE)		
		O 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
		FEB 1 / 1995 13		
		TRADEMINE TRADEMINE		
		·		
•				
	 	16.1		

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner

2000

Date Considered

FORM PTO-1449

JUL 0 6 1999

LIST OF DISCLOSURES CITED BY APPLICANT DENTITY

U.S. Dept. of Commerce
Patent and Trademark Office

Atty Docket No.	Serial No.
P1096R1	09/102,865
Applicant	
Raju	_
Filing Date	Group 1144
23 Jun 1998	1649

(U	se sev	eral sheets if necessary)	Filing Date 23 Jun 1998	Group (649
		OTHER DISCLOSURES (Including Author, Title, Date,		
BBS	1	Dwek et al., "Glycobiology: 'the function of sugar in the IgG mo (Oct 1995)	olecule'" <u>Journal of</u>	Anatomy 187:279-292
	2	Lifely et al., "Glycosylation and biological activity of CAMPATI and grown under different culture conditions" Glycobiology 5(8)		ferent cell lines
	3	Raju et al., "Biological significance and structural features of PAPERS OF THE AMERICAN CHEMICAL SOCIETY (Abstract No. 024) vol.		oforms" <u>ABSTRACTS OF</u>
	4	Umana et al., "A mathematical model of N-linked glycoform biosys 55(6):890=908 (Sep 20, 1997)	nthesis" <u>Biotechnolog</u>	y and Bioengineering
1	5	Wright and Morrison, "Effect of altered CH2-associated carbohydiproperties and in vivo fate of chimeric mouse-human immunoglobul 180(3):1087-1096 (Sep 1, 1994)	rate structure on the lin G1" <u>Journal of Ex</u>	functional perimental Medicine
		•		
	_			
			-	
,				
				
Examine	er ——		ate Considered	Lov
*Examir if not	ner: Ir in cor	itial if reference considered, whether or not citation is in conformance with MPEP formance and not considered. Include copy of this form with next communication	609; draw line through cita to applicant.	ition